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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,679	06/20/2003	Brent G. Carman	SRC-012-P	6741

7590 09/09/2004
Stephen R. Chapman
1220 Baypoint Drive
Seneca, SC 29672

EXAMINER

BERGIN, JAMES S

ART UNIT	PAPER NUMBER
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3641

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Interview Summary	Application No.	Applicant(s)	
	10/600,679	CARMAN, BRENT G.	
	Examiner	Art Unit	
	James S. Bergin	3641	

All participants (applicant, applicant's representative, PTO personnel):

(1) James S. Bergin. (3) _____

(2) Stephen R. Chapman. (4) _____

Date of Interview: 04 September 2004.

Type: a) ☒ Telephonic b) ☐ Video Conference
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☐ No.
If Yes, brief description: _____

Claim(s) discussed: claim 2 and proposed new claim 16.

Identification of prior art discussed: Discussed in general.


Agreement with respect to the claims f) ☒ was reached. g) ☐ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.


Examiner's signature, if required

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent and Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Mr. Chapman discussed the proposed amendment which had been faxed to the examiner's Rightfax at 703-746-5555 on 9/3/2004. The examiner has reviewed the proposed amended claim 2 and the newly proposed claim 16. The claims have been amended to correct deficiencies related to 112 2nd paragraph. Additionally, the proposed limitation, "by said first, carrier frequency and simultaneously in said second frequency" would appear to differentiate claims 2 and 16 from the known prior art. Mr. Chapman stated that he will now work on the other rejected claims in the case.

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FAX

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To: Mr. James S. Bergin

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Date: September 3, 2004

Pages, including this cover: 7

Mr. Bergin:

Thanks for your assistance. The following addresses only the rejection of claim 2 in US patent application No. 10/600,679. I look forward to your comments.

Stephen R. Chapman

Stephen R. Chapman
Reg. No. 45,468

PLEASE SCAN THIS

INFORMAL AMENDMENT

James S. Bergin
EXAMINER
9/4/2004

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The following is an informal reply to rejection of claims made in a Office communication date 08/23/2004 and in response to an informal (telephone) interview with the examiner on Friday, August 27, 2004 with Sephen R. Chapman.

Applicant: Brent Carman Filing Date: 06/20/2003
Application No.: 10/600,679 Examiner: James S. Bergin
Title: Sub-Lethal, Wireless Projectile and Accessories

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Mr. Bergin:

Please consider the following argument as justification for allowing the revised claim 2, now presented as claim 16. For reference, claim 2 has been amended in response to the examiner's rejection under 35 USC 112 and is included below. Claim 2 will be cancelled in view of new claim 16. The rejection of claims 4, 5, and 6 will be addressed pending decisions on new claim 16 as it may be modified to merit allowance.

With respect to the rejection of claim 2 under 35 USC 103(A), please consider the following. Rejection must be based on the establishment of a prima facie case of obviousness by the examiner. Establishing the prima facie case requires satisfaction of each of three specific elements: (i) where references are combined, a clear basis for combining the references must be obvious; (ii) combining the references must result in an expectation of success; it must be obvious to try the modification or combination suggested by combining the references; and (iii) the prior art reference (or references when combined) must teach or suggest all of the claim limitations.

The distinguishing limitation of claim 2 (now claim 16) is the capability of the electric circuit to produce a first wave carrier frequency (or wave length) of 250 to 500 kHz and a second frequency (or wave length) of 15 to 50 Hz. This limitation is reiterated in the claim by the further requirement that the shock must be "transmitted concurrently by said first carrier frequency and by said second frequency."

Rejection of claim 2 is based on US patent 5,689,815 by Ranger issued December 16, 1997 in view of US patent 5,750,918 by Mangolds et al issued May 12, 1998.

The first two of the 11 claims of the '815 patent are directed to the shock system. The other are directed to the projectile and the electrodes. Neither of the first two claims per se suggest use of any specific electrical frequency, let alone the use of two frequency. The specification is silent regarding the role of frequency (or wave length) of the delivered shocking current.

The BACKGROUND of the '815 patent (column 2, lines 39-46) introduces "pulsing" as an important factor. Pulsing is an entirely different characteristic of an electrical current compared to the frequency (or wave length)

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of the current. The SUMMARY OF APPLICANT EXPERIMENTS (column 3, line 53 through column 5, line 49) summarizes the aspect of current anticipated by the '815 patent. Attention is directed to shock strength as a function of voltage with the effects of pulsing as an independent factor. Frequency (or wavelength) of the shocking is not suggested, let alone specifically considered.

Descriptions of the various embodiments continue the emphasis of voltage and pulsing while ignoring electrical frequency (or wave length). The essential electronics are described as "able to provide a incapacitating electric current." No characterization of that current involving wave length, let alone variable wave lengths, is made. The discussion of one possible circuit described in Figure 5 of the '815 patent (column 8, line 24 continuing to column 9, line 33) describes in detail a best mode for a circuit. The capability to produce a current at two frequencies is not addressed, and the circuit as described is not capable of producing such a current. Discussions of alternate circuits related to Figures 6 to 8B and Figure 9 and of electrodes (Figure 10) treat power delivery but do not specify, or remotely suggest delivery or current in more than a single frequency (or wave length). In no case is a specific frequency cited.

Finally, the SUMMARY, RAMIFICATIONS, and SCOPE (column 14 line 9 through 67) of the '815 patent is silent as to wave length (frequency) and reiterates aspects of the projectile and circuit with respect to voltage, with no mention or inference as to wave length.

Because it is silent with regard to wave length (frequency) and because delivery of the disabling charge in two different wave lengths is a specific limitation of claim 2 (now claim 16), US patent No. 5,698,815 fails to establish a prima facie case of obviousness in regards to claim 2 (now claim 16).

The '918 patent describes and claims a "ballistically deployed restraining net system" wherein the net may be capable of delivering a disabling charge to an individual ensnared by the net. Of the 24 claims, only claim 1 is directed to the electrical shocking means. No claim or reference to a shock delivered in two frequencies, or even in a specified single frequency (or wave length) is made.

The STING NET DESIGN (column 9, line 15 through column 10, line 36) of the '918 patent provides a full characterization of the shocking system. The detailed presentation considers voltage factors and pulsing, but is silent regarding wave length (or frequency) of the current delivered. The specification and figures are otherwise silent on aspects of the electrical circuit, including current wave length (or frequency) of current delivered.

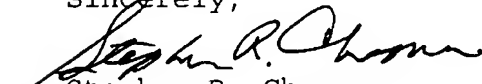
Because the '918 patent is silent on wave length (frequency) as a

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consideration in delivery of a disabling shock, and because delivery of two different wave lengths (frequencies) is a specific limitation of claim 2 (now claim 16), US patent No. 5,750,918 fails to establish a prima facie case for obviousness. Moreover, the '918 patent delivers a disabling shock by means of an electrically energized net, not a projectile. No skin penetrating probes or electrodes are required or employed. As a result, the energy requirements (voltage) for this system is much greater than that of the penetrating probe system of the '815 patent due mainly to differences in conductivity of the skin's surface versus subdural layers. Given these significant differences, there is little justification in combining the references, and considering the silence of both the '815 and '918 patents on the matter of wave length as a limitation, there is no justification for combining. Any rejection based on combining should fail as a result of this failure to establish a prima facie case for obviousness.

Thank you for your assistance. I hope you find my logic reasonable and appropriate the changes resulting in new claim 16 acceptable. I look forward to your informal comments so that I can then proceed with completing a timely, complete reply.

Sincerely,


Stephen R. Chapman
Reg. No. 45,468

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CLAIMS

2. (amended) The wireless projectile of claim 1 wherein:

a. said electric circuit is capable of producing a first, carrier frequency of 250 to 500 kHz and being further
5 capable of producing a second frequency of from ~~10~~ 15 to 50 Hz;

b. said carrier frequency is capable of being regulated to deliver discharges of from 2 to 45 pulses per second with an initial discharge of ~~up~~ to 2 - 8 seconds and at least two subsequent discharges of at least 3 seconds each;

10 c. said electric circuit is further capable of being energized by an independent source of electrical power of from about 1.5 volts to 15 volts;

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d. said electrical circuit terminates in at least one pair of electrodes and each member of said at least one pair of electrodes is capable of penetrating the skin of a target individual and further is capable of delivering a disabling shock to said target individual;

e. said disabling shock is from about 250 volts to about 400 volts and about 3 amps to 15 amps, said disabling shock is delivered ~~in each of two frequencies~~ by said first, carrier frequency and simultaneously in said second frequency at a specified pulse rate of from 2 to 40 pulses per second;

f. said electrical circuit is activated by a proximity sensor and analog switch electrically associated with said two members of said at least one pair of electrodes.

CLAIMS, as amended

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PLEASE NOTE, the following amended claim 2 is provided only to present to the examiner a response to the Section 112 rejections; the limitations of this amended claim 2 are fully incorporated in claim 16.

2. The wireless projectile of claim 1 wherein:

a. said electric circuit is capable of producing a first, carrier frequency of 250 to 500 kHz and being further capable of producing a second frequency of from 15 to 50 Hz;

b. said carrier frequency is capable of being regulated to deliver discharges of from 2 to 45 pulses per second with an initial discharge of to 2 - 8 seconds and at least two subsequent

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discharges of at least 3 seconds each;

c. said electric circuit is further capable of being energized by an independent source of electrical power of from about 1.5 volts to 15 volts;

5 d. said electrical circuit terminates in at least one pair of electrodes and each member of said at least one pair of electrodes is capable of penetrating the skin of a target individual and further is capable of delivering a disabling shock to said target individual;

10 e. said disabling shock is from about 250 volts to about 400 volts and about 3 amps to 15 amps, said disabling shock is delivered in said first, carrier frequency and simultaneously in said second frequency at a specified pulse rate of from 2 to 40 pulses per second;

15 f. said electrical circuit is activated by a proximity sensor and analog switch electrically associated with said two members of said at least one pair of electrodes.

16 (new claim expressing all limitations of initial claim 2)

A wireless projectile comprising:

20 a. an electric circuit capable of producing a first, carrier frequency of from 250 to 500 kHz and further capable of concurrently producing a second frequency of 15 to 50 Hz; said electric circuit further being capable of regulating said first carrier frequency to deliver discharges of from 2 to 45 pulses per
25 second with an initial discharge of from 2 to 8 seconds duration, and at least 2 subsequent discharges of at least 3 seconds duration

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each, said electric circuit also being adapted to receiving and storing electrical energy supplied at 1.5 volts to 15 volts by an independent power source, and said electric circuit terminating in at least one pair of electrodes, wherein each member of said at
5 least one pair of electrodes is capable of penetrating the skin of a target individual and capable of delivering a disabling electric shock to said target individual, said disabling shock being produced by charged elements of said electric circuit and being from about 250 volts to 400 volts and from 3 amps to 15 amps, and
10 said disabling shock being transmitted concurrently by said first carrier frequency and by said second frequency at a pulse rate of from 2 to 45 pulses per second, and said electric circuit being activated by a proximity sensor and analog switch in electrical communication with said members of said at least one pair of
15 electrodes; and

b. a projectile body comprising an outer body made from a material and a longitudinal inner core defined by the outer wall of said projectile body, wherein said longitudinal core is capable of receiving and positioning said electric circuit, said projectile
20 body having a length, a diameter, a front face, and a rear face and said and said projectile body further being adapted to being inserted into a casing to form a cartridge.

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